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Education

- 1999-2002 Marie Curie Fellow at the Victoria University of Manchester, England.
PhD. – ^{40}Ar - ^{39}Ar age determination and petrography of lunar samples: Luna mission and meteorites.
- July –August 2002 International Space University
Summer Session Program 2002 at the California Polytech University in Pomona, California, USA
- 1996-1999 State University of New York at Albany
Albany, NY, USA
Masters of Science in Geochemistry, May 1999: Apollo 14 volcanic green glasses A and B.
- 1993-1996 Syracuse University
Syracuse, NY, USA
B.S. in Geology, 1996
- 1989-1991 State University of New York at Morrisville
Morrisville, NY, USA
A.A.S. in General Horticulture, 1991

Employment

- 07/2007- Present Post-Doc Fellow of Berkeley Geochronology Center, Berkeley, CA, U.S.A.
01/2003 – 06/2007 Post-Doc Fellow of Fundação para a Ciência e a Tecnologia at Instituto Geofísico da Universidade de Coimbra and University of Manchester. The title of the project is: Chronology and Petrology of the Moon and Mars by the integration of data sets: sample analyses and remote sensing.
- Fall 1998 State University of New York at Albany
Albany, NY, USA
Research Assistant for Dr. J.W. Delano. Petrogenic modeling of the Apollo 14 volcanic green glasses
- Summer 1997- Summer 1998 State University of New York at Albany
Albany, NY, USA
Graduate Assistant for Dr. J.W. Delano. Major, minor and trace elements analysis of Apollo 14 volcanic green glasses of group B using high precision electron microprobe. Literature research.
- Fall 1996 - Spring 1998 State University of New York at Albany
Albany, NY, USA
Teaching Assistant
- Summer 1998 Matrix Environmental Technologies, Inc.
Summer 1996 Orchard Park, NY, USA
Internship: Research Assistant for Mr. Sean Carter (Principal Scientist). Evaluation and data entry in Excel Spreadsheet for use in scientific research carried by the company, and library research. Designed conference presentation.

- Summer 1994 Matrix Environmental Technologies, Inc.
Orchard Park, NY, USA
Internship: Project Manager Assistant. Field work which involved surveying and ground water sampling, dissolved oxygen and Volatile Organic Compounds measurements. Site report review and preparation, and job proposal review and preparation.
- 09/1993-05/1996 Syracuse University
Syracuse, NY, USA
Laboratory Assistant for Dr. Scott Samson Geochemistry Laboratory. Responsibilities included sample preparation and management (e.g. rock-comminution) to be used in U-Pb, Rb-Sr, and Sm-Nd mass-spectrometry. Hand-picking of monazites and zircons with reflective microscope for single grain mass spectrometry, mineral separation with heavy liquids, Sm-Nd column chemistry, and X-Ray Fluorescence sample preparation (rock powder mix with flux to be pressed into a pellet or melted into a glass disk).

Other Research Related Activities

- June 2007-Present Co-Investigator of the C1XS instrument in the payload of the lunar orbiter Chandrayaan-1, ISRO (Launched on 22nd October, 2008).
- 2005 – Present
13/12/2004 Member of Portuguese Committee for the International Polar Year (IPY)
First Portuguese person to have ever been at the South Pole
- 2005 – Present Co-Investigator of the MARS-XRD instrument in the payload of the Mars lander EXO-Mars, ESA (scheduled launch in 2013).
- Mid-Nov. 2004 –
Late Jan. 2005 Member of the Antarctic Search for Meteorites (ANSMET) expedition with grants from the Office of Polar Programs of the U.S. National Science Foundation and by the Solar System Exploration Division of NASA. The Principal Investigator of the current grant is Dr. Ralph P. Harvey.
- May 1999-2006 Co-Investigator of the D-CIXS instrument in the payload of the SMART-1 spacecraft of ESA.

Teaching experience

- Fall 2008 University of California at Berkeley - Co-organiser and lecturer of Graduate Seminar on Meteorites
- 2003-2005 Univ. Manchester, UK and Univ. Of Coimbra, Portugal co-supervised two Master students
- Fall 1996 -
Spring 1998 State University of New York at Albany
Albany, NY, USA
Teaching Assistant for the following courses: Geochemistry, Tectonics, Igneous and Metamorphic Petrology, Field Methods and Stratigraphy, Physical Geology Laboratory, and Planet Earth.

Honorary Positions

- 05/2005-Present PPARC visiting Researcher at the University of Manchester
10/2004-9/2006 Honorary Researcher of the University College of London
03/2003-04/2005 Honorary Researcher of the University of Manchester

Research Grants

- 2008-2012 NASA-LASER Team Member of project by Dr. B. Weiss, MIT - \$355,000
- 2005-2008 PPARC Visiting Researcher of the Isotope Cosmochemistry and Geochemistry Group, School of Earth, Atm., and Environ. Sciences, Univ. of Manchester, U.K. - £10,000

2004-2006 Royal Society Joint Project Grant under the Royal Society European Exchange Programme – a grant with the aim of promoting and furthering exchanges between scientists in the UK and other European countries - £23,000

Scholarships

2003-2007 Fundação para a Ciência e a Tecnologia, Portugal – Post-Doc grant
 2002 Fundação para a Ciência e a Tecnologia, Portugal – PhD grant
 1999-2001 Marie Curie Fellowship allocated by the European Commission
 1997 Graduate Assistant Scholarship at SUNY at Albany
 1996 Teaching Assistant Scholarship at SUNY at Albany

Awards

2003 CNES to participate in the Workshop on the Planet Mars at Physics School in Les Houches, France from April 28th to 9th May, 2003.
 2002 Museo de las Ciencias de Castilla-La Mancha Grant to participate at the Congreso Ibérico de meteoritos y geología planetaria at Cuenca, Spain, 24th-26th of October, 2002.
 2002 ESA Scholarship Full Grant to attend the International Space University at California Polytech University at Pomona, California, USA
 2002 NASA-Ames Human Exploration and Development in Space (HEDS) Enterprise Grant to participate at The Moon Beyond 2002: Next Steps in Lunar Science and Exploration Workshop in Taos, New Mexico, U.S.A., 12th-14th September, 2002.
 2002 ESA Grant to Participate at the New Views of the Moon Workshop-Europe in Berlin, 14th-16th of January, 2002.
 2001 Meteoritical Society 'The Meteorite! Brian Mason Student Travel Award' to Participate at the 64th Meteoritical Society Meeting in Rome, Italy, 10th-14th of September, 2001
 2001 ESA Grant to Participate at the 1st LUNEX Convention in Paris, 8th-10th of March, 2001.
 2000 ESA Grant to Participate at the 4th ICEUM meeting on 10th-15th of July, 2000 in Noordwijk, The Netherlands
 1996 Thomas Cramer Award, Outstanding Senior in Geology, Syracuse University.
 1995 Faye Merriam Award, Undergraduate-Major Academic Extra-Curricular Contribution Professional Prop., Syracuse University.
 1994 Thomas Cramer Award, Outstanding Junior in Geology, Syracuse University.

Publications

Papers published

- [1] Fernandes V.A., Burgess R. and Morris A. (2009) Ar-Ar age determinations of lunar basalt meteorites: Asuka 881757, Yamato 793169, Miller Range 05035, La Paz 02205, North West Africa 479 and Elephant Moraine 96008. *Met. And Planet. Sci.* vol. 44, 805-821.
- [2] Haloda, J., Tycova, P., Korotev, R.L., Fernandes, V.A., Burgess, R., Jakes, P., Gabzdyl, P. and Kosler, J. (2009) Petrology, geochemistry, and age of low-Ti mare-basalt meteorite Northeast Africa 003-A: A possible member of the Apollo 15 mare basaltic suite. *Geoch. et Cosmoch. Acta*, 73, 3450-3470.
- [3] Grande M., Maddison B.J., Howe C.J., Kellett B.J., Sreekumar P., Huvelin J., Crawford I.A., d'Uston C.L., Smith D., Anand M., Bhandari N., Cook A., Fernandes V., Foing B., Gasnaut O., Goswami J.N., Holland A., Joy K.H., Kochney D., Lawrence D., Maurice S., Okada T., Narendranath S., Pieters C., Rothery D., Russell S.S., Shrivastava A., Swinyard B., Wilding M., Wiczorek M. (2009) The C1XS X-ray Spectrometer on Chandrayaan-1. *Planetary and Space Science*, 57, 717-724. 10.1016/j.pss.2009.01.016

- [4] Crawford I.A., Joy K.H., Kellett B.J., Grande M., Anand M., Bhandari N., Cook A.C., d'Uston L., Fernandes V.A., Gasnault O., Goswami J., Howe C.J., Huovelin J., Koschny D., Lawrence D.J., Maddison B.J., Maurice S., Narendranath S., Pieters C., Okada T., Rothery D.A., Russell S.S., Sreekumar P., Swinyard B., Wieczorek M., Wilding M.. (2009): The Scientific Rationale for the C1XS X-Ray Spectrometer on India's Chandrayaan-1 Mission to the Moon. *Planetary and Space Science*, 57, 725-734 . doi:10.1016/j.pss.2008.12.006
- [5] Swinyard B. M., Joy K. H., Kellett B.J., Crawford I. A., Grande M., Howe C. J., Fernandes V. A., Gasnault O., Lawrence D. J., , Russell S. S., Wieczorek M. A., and Foing, B.H. and the SMART-1 team (2009) X-ray Fluorescence Observations of the Moon by SMART-1/D-CIXS and the First Detection of Ti K α From the Lunar Surface. *Planetary and Space Science*, 57, 744-750 10.1016/j.pss.2009.01.009.
- [6] Grande M., Maddison B. J., Sreekumar P., Huovelin J., Kellett B.J., Howe C. J., Crawford I.A., Smith D. R. and the C1XS Team (2009) The C1XS X-ray spectrometer on Chandrayaan-1. *The Chandrayaan-1 X-ray Spectrometer. Current Issue (Indian Academy of Sciences)*, 96, 517-519.
- [7] Shearer C.K., Burger P.V., Neal C.R., Sharp Z., Borg L.E., Spivak-Birndorf L., Wadhwa M., Papike J.J., Karner J.M., Gaffney A.M., Shafer J., Weiss B.P., Geissman J., and Fernandes V.A. (2008) A unique glimpse into asteroidal melting processes in the early solar system from the Graves Nunatak 06128/06129 achondrites. *Amer. Mineral.*, 93, 1937–1940.
- [8] Sokol A.K., Fernandes V. A., Schulz T., Bischoff A., Burgess R., Clayton R.N., Münker C., Nishiizumi K., Palme H., Schultz L., Weckwerth G., Mezger K. (2008) Geochemistry, petrology and ages of the lunar meteorites Kalahari 008 and 009: new constraints on early lunar evolution. *Geoch. et Cosmoch. Acta*, 72, 4845-4873.
- [9] Docobo J. A., Trigo-Rodríguez J.Ma, Borovicka J., Tamazian V.S., Fernandes V.A. and Llorca J. (2007) March 1, 2005 Daylight Fireball Over Galicia (NW of Spain) and Minho (N. Portugal). *Earth, Moon and Planets*.
- [10] Grande M., Kellett B., Howe C., Perry C. H., Swinyard B., Dunkin S., Huovelin J., d'Uston L. C., Maurice S., Gasnault O., Couturier-Doux S., Barabash S., Joy K., Crawford I., Lawrence D., Fernandes V., Casanova I., Wieczorek M., Thomas N., Mall U., Foing B., Hughes D., Alleyne H., Russell S., Grady M., Lundin R., Baker D., Murray C. D., Guest J. (2007) The D-CIXS X-ray spectrometer on the SMART-1 mission to the Moon; First Results. *Planetary and Space Science*, vol. 55, pp. 494-502.
- [11] Fernandes, V.A., Burgess, R. and Turner, G. (2005): Volcanism in Mare Fecunditatis and Mare Crisium: Ar-Ar studies. *Geoch. Et Cosmoch. Acta*, 69, 4919-4934.
- [12] Grande M., Browning R., Waltham N., Parker D., Dunkin S.K., Kent B., Kellett B., Perry C.H., Swinyard B., Perry A., Feraday J., Howe C., McBride G., Phillips K., Huovelin J., Muhli P., Hakala P.J., Vilhu O., Laukkanen J., Thomas N., Hughes D., Alleyne H., Grady M., Lundin R., Barabash S., Baker D., Clark P.E., Murray C.D., Guest J., Casanova I., d'Uston L.C., Maurice S. , Foing B., Heather D.J., Fernandes V., Muinonen K., Russell S.S., Christou A., Owen C., Charles P., Koskinen H., Kato M., Sipila K., Nenonen S., Holmstrom M., Bhandari N., Elphic R., Lawrence D. (2003): The D-CIXS X-ray mapping spectrometer on SMART-1. *Planetary and Space Science*, vol. 51, pp. 427-433.

- [13] Dunkin S.K., Grande M., Casanova I., Fernandes V., Heather D.J., Kellett B., Muinonen K., Russell S.S., Browning R., Waltham N., Parker D., Kent B., Perry C.H., Swinyard B., Perry A., Feraday J., Howe C., Phillips K., McBride G., Huovelin J., Muhli P., Hakala P.J., Vilhu O., Thomas N., Hughes D., Alleyne H., Grady M., Lundin R., Barabash S., Baker D., Clark P.E., Murray C.D., Guest J., d'Uston L.C., Maurice S., Foing B., Christou A., Owen C., Charles P., Laukkanen J., Koskinen H., Kato M., Sipila K., Nenonen S., Holmstrom M., Bhandari N Elphic., R., Lawrence D. (2003): Scientific rationale for the D-CIXS X-ray spectrometer on board ESA's SMART-1 mission to the Moon. *Planetary and Space Science*, vol. 51, pp. 435-442.
- [14] Fernandes, V.A., Burgess, R. and Turner, G. (2003): Ar-Ar chronology of lunar meteorites Northwest Africa 032 and 773. *Met. And Planet. Sci.* vol. 38, pp. 555-564.
- [15] Fernandes, V.A. (2002): Northwest Africa 032: A young lunar basalt. *Meteorite*, vol. 8, pp. 36-38
- [16] Fagan, T.J., Taylor, G.J., Keil, K., Bunch, T.E., Wittke, J.H., Korotev, R.L., Jolliff, B.L., Gillis, J.J., Haskin, L.A., Jarosewich, E., Clayton, R.N., Mayeda, T.K., Fernandes, V.A., Burgess, R., Turner, G., Eugster, O. and Lorenzetti, S. (2002): Northwest Africa 032: Product of Lunar Volcanism. *Met. And Planet. Sci.*, vol. 37, No. 3, pp. 371-394.
- [17] Fernandes, V.A., Burgess, R. and Turner, G. (2000): Laser $^{40}\text{Ar}/^{39}\text{Ar}$ age studies of Dar al Gani 262 Lunar meteorite. *Met. And Planet. Sci.* vol. 35, pp. 1355-1364.
- [18] Elkins, L.T., Fernandes, V.A., Delano, J.W. and Grove, T.L. (2000): Origin of lunar ultramafic green glasses: Constraints from phase equilibrium studies. *Geoch. Et Cosmoch. Acta*, 64, 2339-2350.

submitted

- Shearer C.K., Burger P.V., Neal C., Sharp Z., Borg L., Papike J.J., Karner J., Spivak-Birndorf L., Wadhwa, Atudorei N.-V., Gaffney A., Shafer J., Fernandes V.A., Weiss B.P., Geissman J., and Herd C. (*in revision*): Unique Achondrite Graves Nunataks 06128 and 06129. A different perspective into the high- and low-temperature evolution of a new planetary geochemical reservoir.
- Shuster D.L., Garrick-Bethell I., Fernandes V.A., Balco G., Weiss B.P. (*submitted*) A record of impacts preserved in the lunar regolith

in preparation

- Fernandes V.A., J. Fritz, Garrick-Bethell I., Shuster D.L. and Weiss B. (*in preparation*) Complex impact history shown from samples collected in the North Ray impact ejecta – Apollo 16 station 13, and Apollo 17 station 8.
- Fernandes, V.A., Burgess, R. and Turner, G. (*in preparation*) ^{40}Ar - ^{39}Ar studies of two martian meteorites: Shergotty and Dar al Gani 476.
- Fernandes V. A., Anand M., Burgess R. and Taylor L. A. (*in preparation*): Ar-Ar studies of clast-rich feldspathic meteorites: Dhofar 025, 026, 280, 303.

Abstracts

- Fernandes V. A. (2009) ^{40}Ar - ^{39}Ar age for gabbroic lunar meteorite Northwest Africa 5000 (abstract), Goldschmidt Conference Abstracts 2009, A365.
- Joy K. H., Burgess R., Hinton R., Fernandes V. A., Crawford I. A., Kearsley A., Irving A., and EIMF (2009) Petrography and chronology of lunar meteorite NWA 4472 (abstract), Goldschmidt Conference Abstracts 2009, A607.
- Shuster D. L., Weiss B. P. and Fernandes V. A. (2009) Identifying a lunar impact at ~3.3 Ga using ^{40}Ar - ^{39}Ar thermochronometry (abstract), Goldschmidt Conference Abstracts 2009, A1218.

- Fernandes V. A., Korotev R.L. and Renne P.R. (2009) ^{40}Ar - ^{39}Ar ages and chemical composition for lunar mare basalts: NWA 4734 and NWA 4898. LPSC XL, abst.# 1045 (CD-ROM).
- Fernandes V. A., Irving A. J., Kuehner S. M., Gellissen M., Korotev R. L. and Bandfield J. L. (2009) Petrology, bulk composition, Ar-Ar age and IR emission spectrum of lunar meteorite Northwest Africa 4881. LPSC XL, abst.# 2009 (CD-ROM).
- Joy K. H., Burgess R., Hinton R., Fernandes V. A., Crawford I. A., Kearsley A. T., Irving A. J. and EIMF (2009) U-Pb and Ar-Ar chronology of lunar meteorite Northwest Africa 4472. LPSC XL, abst.# 1708 (CD-ROM).
- Shuster D. L., Garrick-Bethell, I., Fernandes V. A. and Weiss B. P. (2008) An Impact Event on the Lunar Surface at ~3 Ga Inferred From $^{40}\text{Ar}/^{39}\text{Ar}$ Thermochronometry of Multiple Samples in Apollo 16 Soil 63503. *Eos Trans. AGU*, 89(52), Fall Meet. Suppl., Abst.# 1002.
- Humayun M., Turner S., Beier C., Widom E. and Fernandes V. A. (2008) Fe-Mn Geochemistry of OIB from the Azores *Eos Trans. AGU*, 89(52), Fall Meet. Suppl., Abst.# .
- Fernandes V.A., Garrick-Bethell I., Shuster D.L. and Weiss B. (2008) Apollo 16 and 17 2-4 mm samples: common 4.2 Ga impact age in samples from the two sites. Early Solar System Impact Bombardment Workshop, abst.#3028
- Garrick-Bethell I., Fernandes V.A., Shuster D.L., Weiss B. And Becker T. (2008) 4.2 Billion year old ages from Apollo 16, 17 and the lunar farside: Age of the South Pole Aitken? Early Solar System Impact Bombardment Workshop, abst.#
- Garrick-Bethell I., Weiss B. P., Becker, T. A., Fernandes V. A., and Shuster D. L. (2008) Evidence for Magnetic Fields on the Early Moon. 2008 Joint Meeting of The Geological Society of America, abst.# 151309.
- Wittmann A., Kring D. A., Reimold U., Hecht L., Schmitt R. -T., Fernandes V. A. (2008) Petrology of impact melt rocks from the Chesapeake Bay crater, USA. GSA abstract id # 149564.
- Garrick-Bethell I., Weiss B., Fernandes V., Shuster D. and Becker T. (2008) New argon ages from the Cayley Plains: and absolute age for the South Pole Aitken Basin. NLSI Lunar Science Conference, abst.#2131.
- Wittmann A., Fernandes V. A., Renne P. R., Schmitt R. T., Reimold W. U., Hecht L., Povenmire H. (2008) Preliminary age of impact melts from the Chesapeake Bay impact structure. Large Meteorite Impacts and Planetary Evolution IV, Vredefort Dome, South Africa, abst.#3093.
- Fernandes V., Becker T., Renne P. and Burgess R. (2008) Preliminary Ar-Ar Studies of Lunar Basaltic Meteorite Dhofar 287-A. Goldschmidt Conf. 2008, Vancouver, Canada, abst.#.
- Garrick-Bethell I., Weiss B., Shuster D., Fernandes V. and Becker T. (2008) Early Lunar Magnetic Fields Recorded Before the Late Heavy Bombardment. Goldschmidt Conf. 2008, Vancouver, Canada, abst.#. A297.
- Morris A., Fernandes V. and Burgess R. (2008) Ar-Ar Ages for Lunar Basalt Meteorites: A 881757, Y 793169, MIL 05035, LAP 02205, NWA479 and EET 96008. Goldschmidt Conf. 2008, Vancouver, Canada, abst.#.
- Fernandes V. A., Wittmann A., Reimold U., Hecht L., Schmitt R.-T., Povenmire H. (2008) Petrology of impact melts from the USGS-ICDPcore Eyreville-B, Chesapeake Bay, USA. LPSC XXXIX, abst.# 2383 (CD-ROM).
- Joy K.H., Crawford I.A., Kearsley A.T., Fernandes V.A., Burgess R. and Irving A. J. (2008) The petrography and composition of lunar meteorite Northwest Africa 4472. LPSC XXXIX, abst.# 1132 (CD-ROM).
- Joy K.H., Crawford I.A., Kellett B., Grande M.N. and the C1XS Science Team (2008) The scientific case for the Chandrayaan-1 X-Ray spectrometer. LPSC XXXIX, abst.# 1070 (CD-ROM).

- Shearer C.K., Papike J.J., Burger P.V., Karner J., Borg L., Gaffney A., Neal C., Shafer J, Fernandes V.A., Sharp Z., Weiss B., and Geissman J. (2008) A meteorite from a new asteroidal geochemical reservoir or Venus? GRA 06129. LPSC XXXIX, abst.# 1825 (CD-ROM).
- Fernandes, V.A., Sokol, A.K., Burgess, R., Bischoff, A., Schultz, T. and Münker, C. (2007) Kalahari 009: One of the Oldest Lunar Mare Basalts - Chronology, Chemical and Petrological Composition, and Source Region. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abst.# 7082.
- Haloda, J., Fernandes, V.A., Burgess R. and Thöni, M. Lunar Mare Basalt Meteorite NEA003-A: Chronology, Chemical and Petrological Composition. *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abst.# 7133.
- Fernandes, V.A., Cohen B.A., Fritz J. And Jessberger, E.K. (2007) Return to the Moon: Ethical, cultural and social aspects – initial approaches to these complex themes with a geological perspective. LEAG Workshop, abst.#3035.
- Joy, K. H., Crawford, I. A., Kellett, B., Grande, M. N. and the C1XS Science Team (2007) The Scientific Case for the Chandrayaan-1 X-Ray Spectrometer. ILEWG_C1XS_ScienceCase, abst.#
- Joy, K.H., Fernandes, V.A., Burgess, R., Crawford, I.A., Irving, A.J., Kearsley, A.T. (2007) The clast inventory of KREEPy lunar meteorite Northwest Africa 4472. 70th Met. Soc. Conf, abst#5223.
- Docobo, J. A., Trigo-Rodríguez, J.M., Borovicka, J., Tamazian, V. S., Fernandes, V.A., Llorca, J. (2007) March 1, 2005 Daylight Fireball over Galicia (NW of Spain) and Minho (N. Portugal). Meteoroids Intern. Conf., Barcelona, Abst.#P27.
- Fernandes, V.A., Burgess, R., Bischoff, A., Sokol, A.K. and Haloda, J. (2007) Kalahari 009 and North East Africa 003: Young (<2.5 Ga) lunar mare basalts. LPSC XXXVIII, abst.# 1611 (CD-ROM).
- Burgess, R., Fernandes, V. A., Irving, A.J. and Bunch, T.E. (2007) Ar-Ar ages of NWA 2977 and NWA 3160 – Lunar meteorites paired with NWA 773. LPSC XXXVIII, abst.# 1603 (CD-ROM).
- Haloda, J., Gabzdy, P., Tycova, P. and Fernandes, V.A. (2007) Lunar meteorite Northeast Africa 003-A: Microstructures, crystallization modeling and possible lunar source areas. LPSC XXXVIII, abst.# 1768 (CD-ROM).
- Grande, M. Kellett, B.J., Howe, C., Perry, C.H., Swinyard, B., Dunkin, S., Huovelin, J., Alha, L., D'Uston, L.C., Maurice, S., Gasnault, O., Barabash, S., Joy, K.H., Crawford, I.A., Lawrence, D., Fernandes, V., Casanova, I., Wiczorek, M., Thomas, N., Mall, U., Foing, B., Hughes, D., Alleyne, H., Russell, S., Grady, M., Lundin, R., Baker, D., Murray, C. D., Guest, J. and Christou, A. (2007) Observations of past lunar landing sites by the D-CIXS X-ray spectrometer on SMART-1. LPSC XXXVIII, abst.# 1768 (CD-ROM).
- Fernandes, V. A. and Burgess, R. (2006) Importance of lunar meteorites in understanding the evolution of the Moon. EUROPLANET Congress #1, abst.# EPSC2006-A-00131
- Fernandes, V. A. and Burgess, R. (2006) Lunar volcanism during the Erastothernian II: NWA 479. 69th Met. Soc. Conf, abst#5312.
- Fernandes, V. A., Burgess, R., Bischoff, A. and Metzler K. (2006) Ar composition of the melt lithology within the NWA 2457 breccia. 69th Met. Soc. Conf, abst#5308.
- Fernandes, V. A., Burgess, R., Bischoff, A. and Sokol, A. K. (2006) Lunar volcanism during the Erastothernian I: Kalahari 009. 69th Met. Soc. Conf, abst#5297.
- Anand, M., Burgess, R., Fernandes, V., and Grady, M.M. (2006) Ar-Ar age and halogen characteristics of nakhlite MIL 03346: records of crustal processes on Mars. 69th Met. Soc. Conf, abst#5257.
- Grande, M., Kellet, B. & D-CIXS Team (2006) First Lunar results of the D-CIXS X-ray spectrometer. COSPAR-Beijing, China, abst.#2006-A-03207.

- Machado, A., Azevedo, J., Fernandes, V.A. and Almeida, D. el Pilar M. (2006) Características Litológicas das Unidades Estratigráficas da Ilha das Flores, Açores. XLIII Congresso Brasileiro de Geologia, Aracaju, 3 -8 September, 2006.
- Kellet, B.J.; Grande, M.; D-CIXS Team (2006) The SMART-1/D-CIXS Observations of Lunar Basins. European Geophysical Union General Assembly, Vienna, Austria, abst. # EGU06-A-10162.
- Grande, M; Kellett, B J; The D-CIXS Team (2006) First Lunar results of the D-CIXS X-ray spectrometer on SMART-1. European Geophysical Union General Assembly, Vienna, Austria, abst. # EGU06-A-06373.
- Wieczorek, M. A., Fernandes, V. A., Joy, K. H.; Crawford, I. A.; Grande, M.; Kellett, B.; The D-CIXS Science Investigation Team (2006) Methods for interpreting D-CIXS X-ray fluorescence data. European Geophysical Union General Assembly, Vienna, Austria, abst. # EGU06-A-04032.
- Burgess, R. and Fernandes, V.A. (2006) Lunar chronology from lunar meteorites. European Geophysical Union General Assembly, Vienna, Austria, abst. # EGU06-A-05133.
- Fernandes, V.A. and Burgess, R. (2006) $^{40}\text{Ar}/^{39}\text{Ar}$ age studies Basaltic Lunar meteorite La Paz 02205. European Geophysical Union General Assembly, Vienna, Austria, abst. # EGU06-A-00818.
- Fernandes, V.A. and Burgess, R. (2006) Ar-Ar studies of two lunar mare rocks: LAP02205 and EET96008. LPSC XXXVII, abst.# 1145 (CD-ROM).
- Fernandes, V.A. (2005): Lunar volcanism: what have we learnt....and what do we still need to learn... Exploring the Moon in the 21st Century, Royal Astronomical Society, London, Nov. 11th 2005.
- Fernandes, V.A. (2005): Importance of lunar meteorites in understanding the evolution of the Moon. Lunar Science: The next decade Workshop, Bad Honnef, Germany, 6-10 June, 2005.
- Fernandes, V.A., Morris, A. and Burgess, R. (2005): New Ar-Ar age determinations for the lunar mare basalts Asuka 881757 and Yamato 793169. LPSC XXXVI, abst.# 1002 (CD-ROM).
- Fernandes, V.A., Anand, M., Burgess, R. and Taylor, L.A. (2004): Ar-Ar studies of Dhofar clast-rich feldspathic highland meteorites: 025, 026, 280, 303. LPSC XXXV, abst.# 1514 (CD-ROM).
- Fernandes, V.A. (2003): Melhoramento da Cronologia Lunar: Utilização do método de ^{40}Ar - ^{39}Ar em amostras basálticas obtidas pelas sondas Soviéticas Luna 16, 20 e 24 e de meteoritos lunares. Congresso Nacional de Ciências da Terra, June 24th-27th, 2003 in Lisbon, Portugal
- Fernandes, V.A. (2002): Can the Period of Lunar Mare Volcanism Be Extended? Congresso Ibérico de Meteoritos e Geologia Planetária. Cuenca, Spain, 24th-26th of October, 2002.
- Fernandes, V.A., Burgess, R. and Turner, G. (2002): North West Africa 773 (NWA773): Ar-Ar Studies of Breccia and Cumulate Lithologies. The Moon Beyond 2002: Next Steps in Lunar Science and Exploration Workshop. LPI, Abts.#3033.
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- Fernandes, V.A, Burgess, R. and Turner, G. (2002): Age determination of lunar regolith samples from the Luna 16 and 24 cores using IR-step heating. LPSC XXXIII, Abst.# 1756.
- Fernandes, V.A., Burgess, R. and Turner, G. (2001): Age determination of Luna 24 core fragments using laser Ar-Ar step heating. New Views of the Moon IV Workshop-Europe, LPI, Abst.#

- Fernandes, V.A., Burgess, R. and Turner, G. (2001): North West Africa 032 (NWA032): Evidence for lunar volcanism at 2.80 Ga. 64th Met. Soc. Conf., Abst.# 5304.
- Fernandes, V.A. (2001): Return to the Moon: Ethical, Cultural and Social aspects – initial approaches to these complex themes. 1st Convention of the Lunar Explorers Society, 8th – 10th March, Paris, France.
- Fernandes, V.A., Burgess, R. and Turner, G. (2001): Basaltic Lunar meteorite North West Africa 032 (NWA032): ⁴⁰Ar/³⁹Ar age studies. Abst. for 26th EGS Conference, Nice, France.
- Dunkin, S.K., Grande, M., Casanova, I., Fernandes, V.A., Heather, D.J., Kellett, B., Muinonen, K. and Russell, S.S. (2000): Science objectives of the D-CIXS X-Ray spectrometer on ESA SMART-1 mission to the Moon. New Views of the Moon III Workshop, LPI
- Fernandes, V.A., Burgess, R. and Turner, G. (2000): Age determination of lunar regolith samples from the Luna 16 core using IR-step heating. 63th Met. Soc. Conf., Abst.# 5244.
- Burgess, R., Holland, G., Fernandes, V. and Turner, G. (2000): New Ar-Ar data of Nakhla minerals. Goldschmitt Conference.
- Fernandes, V.A., Burgess, R. and Turner, G. (2000): Petrologic and chemical studies of samples from Luna 16 and Luna 20 regolith cores. Abstract for 4th ICEUM, Noordwijk, The Netherlands.
- Dunkin, S.K., Grande, M., Heather, D. J., Alleyne, H., Casanova, I., Christou, A., P. E. Clark, Fernandes, V.A., Foing, B. H., Huovenin, J., Kaukkanen, J., Kellett, B., Muinonen, K. and Russell, S.S. (2000): The D-CIXS X-Ray spectrometer on ESA's SMART-1 mission to the Moon: Science objectives. Proc. Lunar and Plan. Sc. Conf., 31st, Abstract # 1648, Lunar and Planetary Institute, Houston (CD-ROM).
- Heather, D.J., Dunkin, S.K., Fernandes, V.A., Kellet, B.J. and Russell, S. (2000): The use of D-CIXS in studies of lunar basins. Abst. for EGS Conference, Nice, France.
- Fernandes, V.A., Burgess, R. and Turner, G. (2000): The potential of D-CIXS to study the chemical composition of the lunar maria. Abst. for 25th EGS Conference, Nice, France.
- Fernandes, V.A., Burgess, R. and Turner, G. (2000): Luna 16 and Luna 20 regolith cores: Petrology and ⁴⁰Ar-³⁹Ar age studies. Abst. For EGS Congerence, Nice, France.
- Fernandes, V.A., Burgess, R. and Turner, G. (1999): Laser ⁴⁰Ar-³⁹Ar age studies of Dar Al Gani 262 lunar meteorite. New Views of the Moon II Workshop, LPI, Abst. 8031
- Burdick, K., Hartnett, J., Adhya, S. and Fernandes, V. (1998): How to popularize geological sciences among secondary school students: Fututre educator's viewpoints. HMPGA Second Ann. Tech. Symp.
- Delano, J.W. and Fernandes, V.A. (1998): Deep-seated magmatic processes reflected by compositional trends within the Apollo 14 glasses. Proc. Lunar and Plan. Sc. Conf., 29th Abstract # 1177, Lunar and Planetary Institute, Houston (CD-ROM).

Technical reports

- Alves E.I., Gilmour J., Azevedo J.M., Bridges J.C., Costa M.S., Fernandes V.A., Figueiredo F.P.O., Gomes C.R., Hegymegy L., Kejik P., Madeira V.M.C., Marinangeli L., Ori G.G., Pais M.A., Popovic R.S., Ripka R.S., Veiga N.A. and Wieczorek M.A. (2003): A magnetic gradiometer on Mars. ESA document MOI-Pasteur-2003, Iss. 1, 71-74.

Marinangeli L., Alves E.I., Baliva A., Bressan M., Ori G.G., Fernandes V.A., Bonanno G., Piluso E., Ponzoni C., Fernández-Remola D., Martínez-Frias J., Gago J.A.M., Moroz L., Basilevsky A.T., Krassilnikov A.S., Basu A. and Gilmore M.S. (2003): A miniaturized X-ray diffractometer of mineralogical analysis of martian soils and rocks. ESA document MOI-Pasteur-2003, Iss. 1, 93-96

Editorial

Fernandes, V.A. (2002): New Views on The Moon – Europe: Future Lunar Exploration, Science Objectives and Integration of Datasets. DLR-Berlin, Germany, January 14-16th, 2002. *Met. And Planet. Sci.*, vol. 37, No. 3.

Invited Lectures

23rd January 2009 – Institute of Earth Sciences, Vrije Universiteit, Amsterdam, The Netherlands.

1st February 2008 – Lunar and Planetary Institute, Houston, Texas, U.S.A.

30th January 2008 – Dept. Earth and Planetary Science, Univ. California at Berkeley, Berkeley, California, U.S.A.

30th January 2007 – John de Laeter Centre of Mass Spectrometry at the Department of Applied Geology, Curtin University of Technology, Perth, Australia.

20th December 2006 – Museum für naturkunde, der Humboldt- Universität zu Berlin, Germany

27th November 2006 - Institut für Planetologie, Westfälische Wilhelms-Universität Münster, Germany

10th November 2006 – Royal Astronomical Society meeting, *Solar-System Exploration* by Spacecraft and by Sample Analysis.

28th September 2006 - I *Importance of lunar meteorites in understanding the evolution of the Moon.* Geological Institute, University of Copenhagen Denmark

18th June 2006 - *Dating meteorites using argon isotopes and other methods.*

Chautauqua Short Courses, Northern Arizona University, Flagstaff, Arizona, USA.

19th May 2006 – *Hunting for meteorites at the Antarctic Plateau.* Lecture for Master student at the Dept. of Earth Sciences, Univ. Coimbra, Portugal.

2nd February 2006 – *Moon: what have we learnt and what we need to learn.* Dept. Mathematics and Astronomy at Univ. Coimbra, Portugal

7th April 2004 – *Lunar mare volcanism period: has it been extended?* At the former Danish Lithospheric Centre in Copenhagen, Denmark.

5th Dec. 2001 – *Can the period of lunar mare volcanism be extended?* At the Meteoritics & Cosmic Mineralogy Division of the Department of Mineralogy of the Natural History Museum, London, UK.

Public Outreach Articles&Lectures&Media

April 2009 - Lectures: “À Caça de meteoritos no planalto Antártico” at the Museu Nacional de História Natural (Univ. Lisboa) and Instituto Superior Técnico.

August 2008 – Participation in the collaboration between the Portuguese Committee for the International Polar Year and the Portuguese Postal Service in the elaboration of the 2008 Calendar Book (sold for the public).

June 2007 – Lecture for three schools from the County of Odivelas, Portugal integrated in the activities of the Portuguese Committee for the International Polar Year (IPY): How to search for meteorites in the Antarctic plateau.

September 2006 – Interview for Portuguese Radio Station Antena 1 and the newspaper Diário de Notícias for the theme of the “crash” of the ESA mission SMART-1.

May 2006 – Two lectures at the School of Gavião, Portugal for students in the age range of 11 and 15 years. One lecture in the Town Hall of Portalegre, Portugal for school students of the city during the celebration of World Children Day: How to search for meteorites in the Antarctic plateau.

January 2006 - Interview for the magazine *Visão*, a weekly portuguese opinion magazine.

October 2005 - *Lecture*: , “*Ciência Lunar: O que aprendemos da e na Lua... O que nos falta aprender...*” for the public outreach event at the University of Coimbra “2 anos depois do lançamento da missão lunar SMART-1 da ESA. Organized by Vera A. Fernandes.

Lectures: “*À Caça de meteoritos no planalto Antártico*” and “*Ciência Lunar: O que aprendemos da e na Lua... O que nos falta aprender...*” for the public outreach event at Argoselo, Portugal “Sol: eclipse anular” organized by NUCLIO and Sinergiae.

September 2005 - *Lecture*: *À Caça de meteoritos no planalto Antártico*. At the Lisbon Oceanário.

June 2005 – *Lecture*: *À Caça de meteoritos no planalto Antártico*. At the Lisbon Geographic Society.

June 2005 – Interview for the magazine *Pública*, an insert on the Sunday issue of the Portuguese newspaper *Público*.

April 2005 – Interview for the Portuguese National Geographic regarding my recent participation on the ANSMET expedition to Antarctica.

February 2005 – Interview for the Univ. of Coimbra newspaper, *ACABRA*, regarding my recent participation on the ANSMET expedition to Antarctica.

February 2005 – two interviews for the Portuguese national radio (RDP) regarding my recent participation on the ANSMET expedition to Antarctica.

February 2005 – two interviews for the Portuguese national television (RTP) regarding my recent participation on the ANSMET expedition to Antarctica.

June 2004 – *Lecture*: *Aspectos Éticos e Sociais de um possível retorno à Lua – uma perspectiva Geológica*. At Arte-Ciência meeting organised by the Univ. of Azores at Angra do Heroísmo.

May 2004 – Review of chapters of a book written by Prof. Manuel Paiva of the Free University of Brussels (published in November 2004): *Como respiram os astronautas: e outros problemas de física biomédica*.

September 2003 – in collaboration with Miguel Almeida da ESA, text about lunar science for the portuguese website *Portal do Astrónomo*
http://www.portaldoastronomo.org/tema_17.php

September 2003 – Poster: *D-CIXS Detecção remota de raios-X reflectidos da superfície da Lua para o estudo da sua composição química*. For the event to celebrate the launch of the ESA mission to the Moon SMART-1. Organised by Planetário Calouste Gulbenkian.

August 2003 – Interview for the portuguese newspaper *Diário de Notícias* on the SMART-1 mission and lunar science.

August 2003 – Interview for the portuguese FOCUS magazine on the SMART-1 mission and lunar science.

April 2003 – *Lecture*: *O Sistema Solar: um lugar incrivelmente diverso*. Organised by the Physics/Astronomy student organisation at the University of Coimbra.

January 2003 – *Lecture*: *O Sistema Solar: um lugar incrivelmente diverso*. Organised by NUCLIO no estabelecimento da Biblioteca República e Resistência.

June 2002 – article: Northwest africa 032: a young lunar basalt. Published in the Magazine *Meteorite*

Journal Referee

American Mineralogist
Geochimica et Cosmochimica Acta
Journal of Geophysical Research – Planets
Meteoritical and Planetary Sciences

Proposal Referee

NASA-NSPIRES research grant proposals

Meetings and Conferences Organisation

Session Co-Convener and Chair Goldschmidt Conference, Davos, Switzerland (2009)
Session Co-Convener and Chair Goldschmidt Conference, Vancouver, Canada (2008)
Session Co-Convener and Chair at the EUROPLANETS Conference, Berlin, Germany (2006).
Session Co-Convener and Chair at the EGU-Vienna, Austria (2006).
Session Chair at the 37th Lunar and Planetary Sciences conference, Houston, USA (2006).
SMART-1 mission (ESA) Science working team meeting, Coimbra, Portugal (2005).

Other Activities

January 2003-Present – Simultaneous contacts with the Portuguese Minister of Science and Technology, the Vice-rector for research at the University of Coimbra, and the President of the main research funding Agency (Fundação para a Ciência e a Tecnologia – FCT) for the improvement of the situation of the Post-Docs (e.g. work conditions, recognition of the post-docs existence by the institutions and their importance) in Portugal.

Special Skills

Ar-Ar Mass-Spectrometry (MS1), Scanning-Electron Microscopy (SEM), Electron Microprobe geochemical analysis (EMPA); use of geochemical clean-lab (Sm-Nd column chemistry); familiar with X-Ray Fluorescence; and familiar with X-Ray Diffraction.

Computer Skills

Microsoft Word, Excel, Power Point, Origin, SigmaPlot, Fig.P, FigSys, Photoshop, Adobe Illustrator, Adobe-PageMaker; Familiar with IDL-ENVI and CorelDraw software.

Memberships

American Geophysical Union
Geochemical Society
Meteoritical Society